

AMENDMENT

In the Claims:

The following listing reflects the currently pending claims. No amendments are made herein.

1. (Previously presented) A mucosal vaccine comprising:
 - (a) a diphtheria antigen, a tetanus antigen, and an acellular pertussis antigen; and
 - (b) a detoxified *E. coli* heat labile toxin, wherein the detoxified *E. coli* heat labile toxin is LT-K63 or LT-R72, wherein said vaccine is adapted for intranasal administration.
2. (Previously presented) The vaccine of claim 1, wherein the acellular pertussis antigen is detoxified.
3. (Previously presented) The vaccine of claim 2, wherein the acellular pertussis antigen comprises detoxified pertussis holotoxin and filamentous haemagglutinin.
4. (Previously presented) The vaccine of claim 3, wherein the acellular pertussis antigen further comprises pertactin.
5. (Previously presented) The vaccine of claim 3, wherein the detoxified pertussis holotoxin is a 9K/129G double mutant.
6. (Previously presented) The vaccine of claim 1, wherein the diphtheria antigen is detoxified.
7. (Previously presented) The vaccine of claim 6, wherein the detoxified diphtheria antigen is CRM197.

8. (Previously presented) The vaccine of claim 1, wherein the tetanus antigen is a tetanus toxoid.

9. (Previously presented) The vaccine of claim 1, further comprising at least one additional non-diphtheria, non-tetanus and non-acellular pertussis antigen.

10-20. (Canceled)

21. (Withdrawn - previously presented) A method of generating an immune response in a patient, comprising intranasally administering to the patient a vaccine according to claim 1.

22. (Withdrawn) The method of claim 21, wherein the patient is a child.

23. (Withdrawn - previously presented) The method of claim 21, wherein intranasal administration is performed at least twice.

24. (Withdrawn - previously presented) The method of claim 21, wherein, prior to intranasal administration, the method comprises the step of non-mucosally administering to the patient a vaccine comprising a diphtheria, a tetanus and an acellular pertussis antigen.

25. (Withdrawn - previously presented) The method of claim 21, wherein, subsequent to intranasal administration, the method comprises the step of non-mucosally administering to the patient a vaccine comprising a diphtheria, a tetanus and an acellular pertussis antigen.

26. (Canceled)

27. (Withdrawn) The method of claim 21, wherein an immune response is generated against whooping cough, diphtheria and tetanus.

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28-34. (Canceled)